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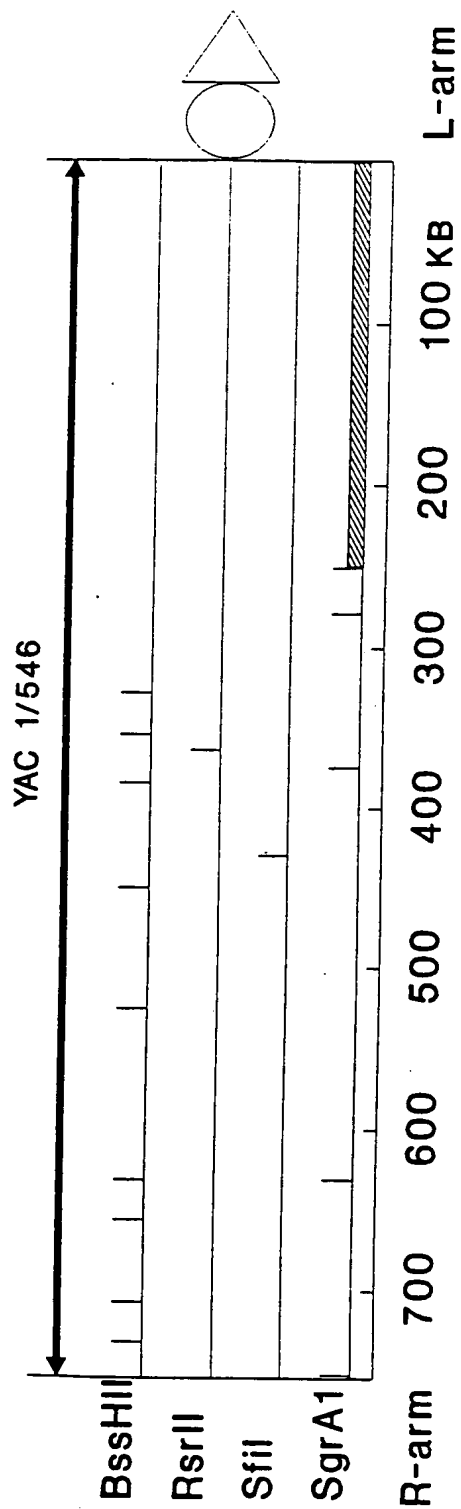


FIGURE 1

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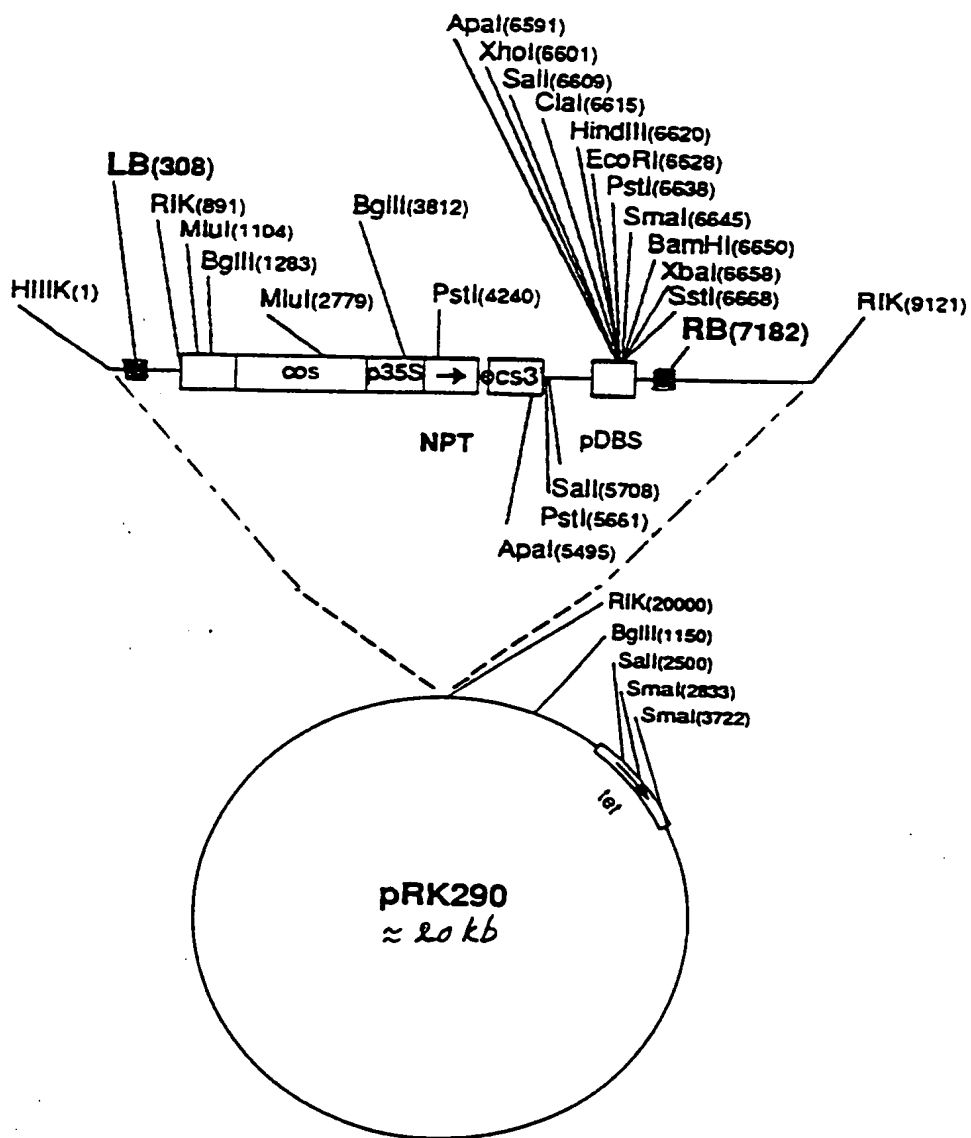


FIGURE 2

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QA31001L N[...]

1 2 3 4 5 6 7 9 10 11 12 13 14 15 16 17 18 19 20 21 23 24

Temple

1 = B56
2 = A31
3 = A30
4 = B38
5 = CC13
6 = B31
7 = AA12
8 = DD2
9 = CC14
10 = A52
11 = B22
12 = A65
13 = A25
14 = A55
15 = CC16
16 = A44
17 = A29
18 = E20
19 = E4
20 = E15
21 = AA5
22 = E22
23 = CC3
24 = AA2

FIGURE 3

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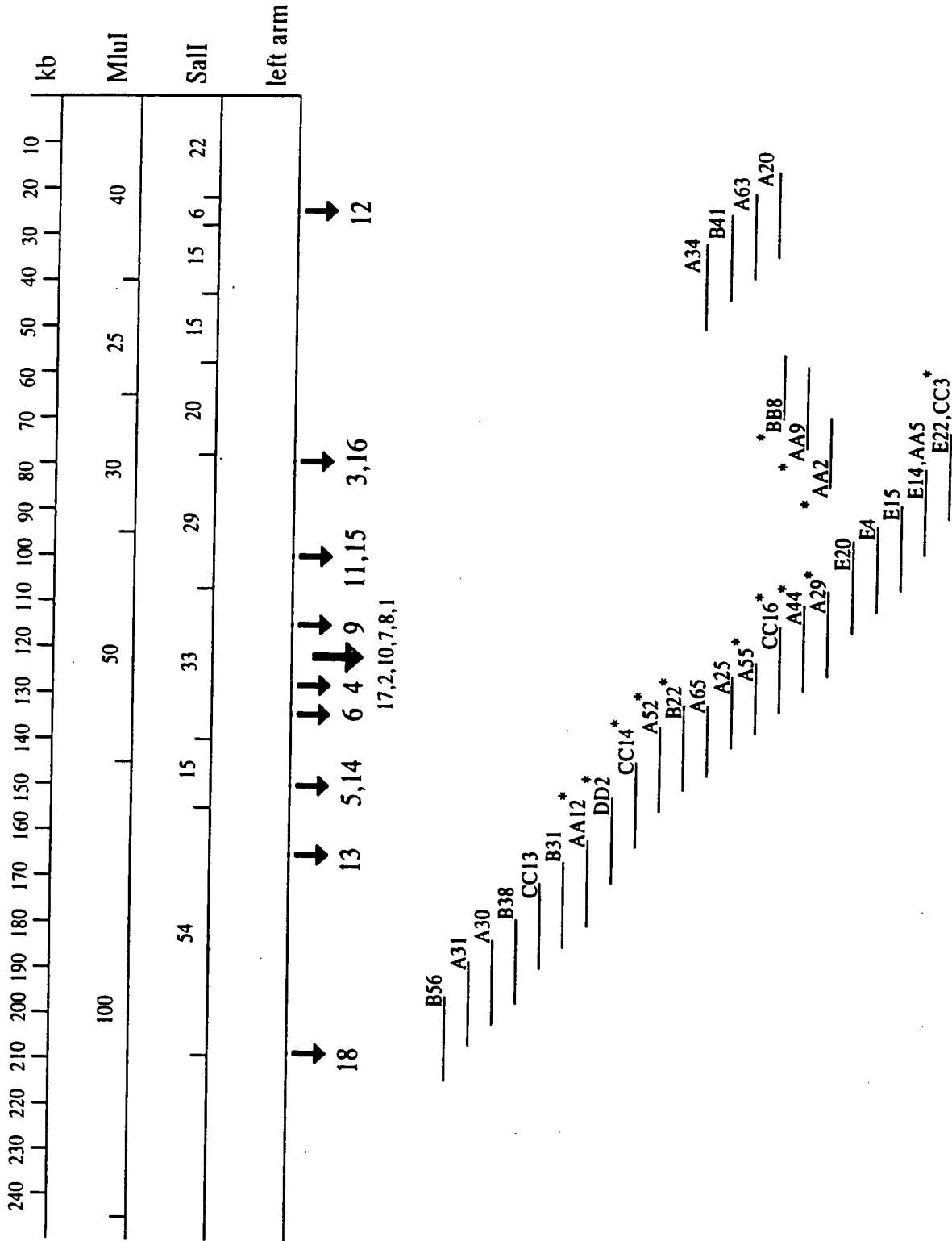


FIGURE 4



5' -AAAAAGCAGCTTTAAAAAAGTACTTTKGAAAGGKGCTGAACTTATTTTTTGAAATAA 60
GCAGTTATGTGTTTGGAAWAAAAGTGCTGAAGTTGCTATGTCAAACATGAAAAGGGRAAA 120
AATGGAAGAAAGAGWTGTTAGGGTTATGTTCGTAATTTGGAGATTGTATAAAAAATATTAAG 180
GGCAAAAAAATAAAAAATGTGTCAACTTAAAACAGCTTATAAGCTAAAAGTTAAAAGCTG 240
GGGTAGAGGTGTTTTTTTTTTTTTTAGCTTATAAGTTGTTTTAAGTTGACCACATTTTTTA 300
TTTTTKTTGCCCTTAATATTTTTTATACAATCTCAAAATTACGACATAACCCTAACATCTT 360
TTTCTCCCATTTTTTTCCTTTTCACGTTTGACATAGCAACTTCAGCACTTTTATCCAAACA 420
CATAACTGCTTATTTTAAAAATAAGTTTCAGCACTTTCAAAAGTACTTTTTTAAAGCTGC 480
TTTTATTAAGCCCATCCAAACGGGCCCTAAAATTGCTAATGTTTGCTCTTCTATTCTCA 540
AACTCCGTAATATTTAAGAAAATTGCTAATGATAGGTCACTTTTAACACTAAATAATTA 600
TAAATTGGGTAGAAATTTATTTATCATTTTAAGCTTTTTTAATTTTGAGTCTTCTCCCTA 660
ATTAAGACCTTCCCCTCTTGCTTCAATTATTTAACTGAATAGTCTTTGTCTTATTGTTG 720
GGTGAAAGTCTGTCTTCTTGTTAGGTACTAAGTCTTACAATAATATCAATAATTTGCTAT 780
GGAGAAAAAATATTATAGGAGAAAAATAATTAATTTTAATTCATGAATATGTCTTAATA 840
TGCAACTCATTTTGCTTATATATATCAAATTAACCTCTGTTCCCTTAACTTTTTTCCTATG 900
AAGATACATTTTAAATTTATTTGATGAGGTTAGTTTTGAAATTTATATTATAATAATGAAA 960
TGATATAACTTAAAAGAAGTTGTTTGATATCTTATCAGAATCATGCAGGTACTCATAATA 1020
TAAGAAATAATTATGATGAAATTTATATATGTTTTATGCAGAGATTTATTACGCATTGTT 1080
TACTTGGGTATGTATTACTTATTTTATCTTTTATCAGAATGTAAAATTATCATTCAATA 1140
AGAAATCCAATTCTGTAAATTCAAATAACAATAACATTTTCAAGACCGATTTTTTT 1200
GCCCAAGAATATACAGTAAACATATTTATGATATGGTAGGTCTCTTTAGTAATTGACCAA 1260
CAAGGATTGTGGTGGAGTGGGAAATACTCTTTAATACTTCACCAAGAGGTCTCCAATTG 1320
AGCCCCTGAATACGAAATCGTCTTTGTAGTATATACCCTAACCTAATACAAAATTAGT 1380
ATATTAGCCTTACAGCTAAAATCTTTGTGACCTGTAAGTCACGCGAGGACAAATTTACC 1440
GTAACACCAACTTATTCATGATATAATTTGTCCCTTTTAGCACGGTAATAATGAGGTGGGT 1500
AGAAATTTATTACTTGAGGGCCCTTTCTACACCCACCCTTATTCTCTTGCTTCAATTATT 1560
GAATTGAAGAAGTAATGAAAAACAGACTCCATTGGATAAAGGACAGTTTGCAAACACAG 1620
CTGTAACAATTTAGAGCACTAGCAAAATAGAGAGAGTTTTGAGAGAAATTTTTGTTTGCA 1680
AATTACTCTTAACCTTCAGCAGGTAAAATAAAGTTCTTAACTGAGACTATTTGAAGATAT 1740
ATTTTGTTAAAGAATCATTTTGTGTGTTTCTTGTGTTTTGCTTTTGCAGATTTGAGAAATG 1800

M 1

GAGATTGGCTTAGCAGTTGGTGGTGCATTTCTCTCCTCAGCTTTGAATGTTCTGTTTGAT 1860
E I G L A V G G A F L S S A L N V L F D 21
AGGCTTGCTCCTAACGGTGATCTGCTCAACATGTTTCGGAAGCATAAGGATCATGTTAAG 1920
R L A P N G D L L N M F R K H K D H V K 41
CTCTTAAAGAAGCTGAAAATGACTTTGCGTGGTATTCAGATTGTGCTAAGTGATGCAGAG 1980
L L K K L K M T L R G I Q I V L S D A E 61
AATAAGCAAGCATCAAATCCATCTGTGAGAGACTGGCTTAATGAGCTTCGAGATGCTGTC 2040
N K Q A S N P S V R D W L N E L R D A V 81
GACTCTGCTGAAAATTTAATAGAAGAAGTCAATTATGAAGCTTTGAGGCTTAAGGTGGAA 2100
D S A E N L I E E V N Y E A L R L K V E 101
GGTCAGCATCAGAATTTTTTCAGAAACAAGCAACCAGCAAGTAAGTGATGATTTTTTCTCTT 2160
G Q H Q N F S E T S N Q Q V S D D F F L 121
AACATAAAGGACAAGCTGGAAGACACTATTGAAACATTAAAGGATTGCAAGAGCAAATT 2220
N I K D K L E D T I E T L K D L Q E Q I 141
GGTCTCCTTGGCTTAAAGGAGTATTTTGATTCCACGAACTAGAACTAGAAGACCTTCA 2280
G L L G L K E Y F D S T K L E T R R P S 161
ACTTCTGTGGATGATGAATCTGATATCTTTGGTAGGCAGAGCGAAATAGAGGATTTGATT 2340
T S V D D E S D I F G R Q S E I E D L I 181
GACCGTCTATTGTCTGAAGGTGCAAGTGGGAAAAAGCTGACAGTAGTTCCTATCGTTGGA 2400
D R L L S E G A S G K K L T V V P I V G 201
ATGGGCGGCCAGGGCAAGACAACACTTGCTAAAGCCGTATACAATGATGAGAGGGTGAAG 2460
M G G Q G K T T L A K A V Y N D E R V K 221
AATCATTTTGATTTGAAAGCGTGGTATTGCGTTTCTGAAGGATTTGATGCTTTGAGAATA 2520
N H F D L K A W Y C V S E G F D A L R I 241
ACAAAAGAATTACTCCAAGAAATTGGCAAATTTGACTCGAAGGATGTCCACAACAATCTT 2580
T K E L L Q E I G K F D S K D V H N N L 261

FIGURE 6a

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AACCAGCTTCAAGTCAAATTGAAGGAAAGTTTGAAGGGAAAGAAGTTCCTTATTGTTTTG 2640
 N Q L Q V K L K E S L K G K K F L I V L 281
 GATGATGTGTGGAATGAAAATTACAACGAGTGGAATGACTTGAGAAATATTTTTGCACAA 2700
 D D V W N E N Y N E W N D L R N I F A Q 301
 GGAGATATAGGAAGTAAGATCATTGTGACGACACGCAAAGACAGTGTTCCTTGATGATG 2760
 G D I G S K I I V T T R K D S V A L M M 321
 GGAAATGAGCAAATTCGCATGGGCAATTTGTCTACCGAAGCCTCTTGGTCTTTATTCAA 2820
 G N E Q I R M G N L S T E A S W S L F Q 341
 AGACATGCATTTGAAAACATGGATCCTATGGGACATCCGGAAGTGAAGAGGTGCGGAAGA 2880
 R H A F E N M D P M G H P E L E E V G R 361
 CAAATTGCAGCCAAGTGCAAAGGACTGCCCTTAGCTCTGAAGACGCTCGCTGGCATGTTA 2940
 Q I A A K C K G L P L A L K T L A G M L 381
 CGCTCCAAATCAGAGGTTGAAGAGTGGAACGTATTTTGAGAAGTGAAATATGGGAGCTG 3000
 R S K S E V E E W K R I L R S E I W E L 401
 CCACAAATGACATATTACCAGCGTTGATGTTGAGCTACAATGATCTTCCCGCACATTTA 3060
 P H N D I L P A L M L S Y N D L P A H L 421
 AAGCGATGCTTTTCTTTTGTGCAATATTTTCTAAAGATTATCCATTTAGGAAAGAACAA 3120
 K R C F S F C A I F P K D Y P F R K E Q 441
 GTTATTCATCTATGGATTGCCAATGGTCTCGTACCAGTGAAAGATGAAATAAATCAAGAT 3180
 V I H L W I A N G L V P V K D E I N Q D 461
 TTAGGCAACCAATACTTTCTAGAGTTGAGATCAAGATCATTATTTGAAAAGGTCCCAAAT 3240
 L G N Q Y F L E L R S R S L F E K V P N 481
 CCTTCTAAAAGGAACATAGAGGAATTATTCCTTATGCATGACCTTGTCAATGATTTAGCC 3300
 P S K R N I E E L F L M H D L V N D L A 501
 CAACTTGCATCTTCAAACTTTGTATCAGGTTAGAAGAGAGCCAAGGATCTCATATGTTG 3360
 Q L A S S K L C I R L E E S Q G S H M L 521
 GAACAATGTCGGCACTTATCTTATTCATAGGATTAAATGGTGAGTTAAGAAATTGACA 3420
 E Q C R H L S Y S I G F N G E F K K L T 541
 CCCCTCTACAAATTGGAGCAGTTGAGGACATTGCTTCCGATACGTATTGAATTCAGATTG 3480
 P L Y K L E Q L R T L L P I R I E F R L 561
 CACAATCTAAGCAAGAGGGTGTTCATAACATACTGCCTACACTAAGATCCTTGAGGGCC 3540
 H N L S K R V L H N I L P T L R S L R A 581
 CTATCATTCTCTCAATACAAGATTAAGGAGTTGCCAAATGACTTGTTTACCAAATTAAG 3600
 L S F S Q Y K I K E L P N D L F T K L K 601
 CTCCTCAGATTTTGGATATTTCTCGGACATGGATTACAAAGTTGCCGGATTCCATTTGT 3660
 L L R F L D I S R T W I T K L P D S I C 621
 GGATTATATACTTGAGACACTTCTCCTGTCTCTTGCTGATCTTGAGGAGCTACCG 3720
 G L Y N L E T L L L S S C A D L E E L P 641
 CTGCAGATGGAGAAGTTGATTAAGTTCGCTCATCTTGACGTAAGCAACACTCGGCGCTTG 3780
 L Q M E K L I N L R H L D V S N T R R L 661
 AAGATGCCACTACATCTGAGCAGGTTGAAAAGCCTCCAAGTGTGGTGGGACCCAAGTTT 3840
 K M P L H L S R L K S L Q V L V G P K F 681
 TTTGTAGATGGTTGGAGAATGGAAGATTTGGGTGAAGCACAAACTTACATGGATCTCTA 3900
 F V D G W R M E D L G E A Q N L H G S L 701
 TCAGTTGTGAAGTTGGAAAATGTGGTTGATAGAAGGGAAGCTGTGAAGGCAAAGATGAGG 3960
 S V V K L E N V V D R R E A V K A K M R 721
 GAGAAGAATCATGTTGAGCAATTATCATTGGAGTGGAGTGAAGTAGTATTGCCGACAAT 4020
 E K N H V E Q L S L E W S E S I A D N 741
 TCACAAACAGAAAGTGACATACTTGATGAGCTATGCCACATAAAAACATCAAAAAGTC 4080
 S Q T E S D I L D E L C P H K N I K K V 761
 GAAATCAGTGGATATAGAGGGACAACTTTCCCAATTGGGTAGCTGATCCTTTGTTTCTT 4140
 E I S G Y R G T N F P N W V A D P L F L 781
 AAGCTGGTGAATTTGTCTCTAAGAACTGCAAGGACTGTTACTCCTTGCCAGCACTAGGA 4200
 K L V N L S L R N C K D C Y S L P A L G 801
 CAACTCCCTTGTTTGAAATTCCTTTCCGTAAAGGGATGCATGGAATAAGAGTGGTGACG 4260
 Q L P C L K F L S V K G M H G I R V V T 821

FIGURE 6b

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GAAGAATTCTATGGCAGATTGTCCTCCAAAAAGCCTTTTAACTCTCTAGAGAAGCTTGAA 4320
E E F Y G R L S S K K P F N S L E K L E 841
TTTGAAGATATGACGGAGTGAAGCAATGGCACGCACTAGGAATTGGAGAGTTCCCTACA 4380
F E D M T E W K Q W H A L G I G E F P T 861
CTTGAGAACCTTTCAATTA AAAATTGCCCTGAGCTCAGTTTGGAGATACCCATCCAATTT 4440
L E N L S I K N C P E L S L E I P I Q F 881
TCAAGTTTAAAAAGGTTAGAAGTTAGTGATTGTCCAGTTGTTTTTGATGATGCCCAACTG 4500
S S L K R L E V S D C P V V F D D A Q L 901
TTTAGATCCCAACTTGAGGCAATGAAGCAGATTGAGGAAATAGATATATGTGATTGTAAC 4560
F R S Q L E A M K Q I E E I D I C D C N 921
TCTGTTACCTCCTTTTCTTTTAGCATACTGCCAACTACCTTGAAGAGAATACAGATATCT 4620
S V T S F P F S I L P T T L K R I Q I S 941
CGTTGCCCAAAATTGAAATTGGAGGCGCCAGTTGGTGAGATGTTTGTGGAGTATTTGAGA 4680
R C P K L K L E A P V G E M F V E Y L R 961
GTGAATGATTGTGTTGTGTAGATGATATATCACCTGAGTTTCTCCCAACAGCACGTC AA 4740
V N D C G C V D D I S P E F L P T A R Q 981
TTGAGTATTGAAAATTGCCAGAACGTTACTAGGTTTTTGATTCCCTACTGCCACTGAAACT 4800
L S I E N C Q N V T R F L I P T A T E T 1001
CTCCGTATTTTGAATTGTGAGAATGTTGAAAACATCGGTGGCATGTGGAGGAGCGGCC 4860
L R I S N C E N V E K L S V A C G G A A 1021
CAGATGACGTCACTGAATATTTGGGGATGTAAGAAGCTCAAGTGTCTTCCAGAACTCCTT 4920
Q M T S L N I W G C K K L K C L P E L L 1041
CCATCTCTCAAGGAAC TCGTCTGTCTGATTGTCCAGAAATAGAAGGAGAATTGCCCTTC 4980
P S L K E L R L S D C P E I E G E L P F 1061
AATTTAGAAATACTCCGTATCATATATTGCAAGAACTGGTGAATGGCCGAAAGGAGTGG 5040
N L E I L R I I Y C K K L V N G R K E W 1081
CATTTACAGAGACTCACAGAGTTATGGATCGATCATGATGGGAGTGACGAAGATATTGAA 5100
H L Q R L T E L W I D H D G S D E D I E 1101
CATTGGGAGTTGCCTTGTCTATTGAGACTTACCATAAAGAAATCTTAAACATTAAGC 5160
H W E L P C S I Q R L T I K N L K T L S 1121
AGCCAACATCTCAAAAAGCCTCACCTCTCTTCAATATCTATGTATTGAGGGTTATTTATCT 5220
S Q H L K S L T S L Q Y L C I E G Y L S 1141
CAGATTCAAGTACAAGGCCAGCTTTTCTCCTTTTCTCACCTCACTTCGCTTCAAACCTCTA 5280
Q I Q S Q G Q L S S F S H L T S L Q T L 1161
CAAATCTGGAATTTCTTAATCTCCAATCACTTGCTGAATCAGCACTGCCCTCCTCCCTC 5340
Q I W N F L N L Q S L A E S A L P S S L 1181
TCTCACCTGGAGATAGATGATTGCCCTAATCTCCAATCACTCTTCGAATCAGCACTGCCC 5400
S H L E I D D C P N L Q S L F E S A L P 1201
TCCTCCCTCTCTCAGCTGTTTATCCAGGATTGCCCTAATCTCCAATCCCTTCCATTTAAA 5460
S S L S Q L F I Q D C P N L Q S L P F K 1221
GGGATGCCCTCTTCCCTCTCTAACTATCTATTTTCAATTGCCCATGCTCACACCACTA 5520
G M P S S L S K L S I F N C P L L T P L 1241
CTAGAATTTGACAAGGGGGAATACTGGCCACAAATTGCTCATATTCCCATCATAAATATC 5580
L E F D K G E Y W P Q I A H I P I I N I 1261
GATTGGAAATATATTTAACAATTA AAAACAAATGGCTCTCCAAC TGAAGCTATTTCGT 5640
D W K Y I --- 1266
TACCCTTAGAAGCTTTTTATGATTCTATGTTTCTCATTGCTTATTGGTTTATGCTCTTAC 5700
CGTGTTTTAAATTCAGTCTCAATTGCCACCATGTTTAATCGAAAGTTTTTAGTTCTTGTA 5760
ATCATCAACCATCCTATGTCACTAGAAAATTTTGATAGGTAAAAGAGGTAGACAAAAAGC 5820
TAAACATCTTTTTTCTTTTCGTATAGCGACCAACAACATACATTTTGTAGGTAAAGGGCTA 5880
TAGATATACATTTGCAGGGTGTTAAACCAAGGAGTAAGAAAATCACTGTCTTCAGATATC 5940
TTCTCTTGCAATATACTTTTGAATTTTAAAGCTACATTTTGAAC TCA TGTGTTGTTGCTAA 6000
CTTAAACATGTTTTGTGCTTAATCAGATGTGGATTTTGAAGAGCGAGTACGACAAGTCTG 6060
GTACATTAATTGTCCGTAGAAGTGTTC TAAGGTGCTGCTGCTATTTTTACATCTGTTCC 6120
CGAGTTTTGTTTTTTTTTTTAAATCTTTCCACTAAAGCTATTATGTCTCCACAGTGAATT 6180
TTCAGGTCTGTTGTTATAGGCAAGTCTTTGAGATGCGACTATCAAAGAAGGGCGATTACA 6240

FIGURE 6c

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ATCAGTGTACCGCTGAAACTATTTTCATGTTTCCAGTGCAAGCCTCTTTTGTAAGTTGACA	6300
AACTCGATTAGTTAATATGTTTGGGACTCAACTAGTGGTTAGAGTACTCATTGTAAGA	6360
CTTGTGTACAGAAAATCAAATTAGAATTATAACTCGTGATGGTTGAATAAACTCTAAGAA	6420
GTACTGATATATTTTTTAGTGGATATGTTGTTTGCTCATTTCGGTGTTTGATATCCACATT	6480
GGAGTCCAACATAAATTCGAATTTGCACAATCGAAGGAGCGGTGCTCCTGGCATGATTTTT	6540
TTCCCATTCTACGACTAGTGCTCCTAAATTCTAATTAAGCATAGAAAAATCTCAACTATC	6600
TCACCCAACATCATATCAGGATAGAGTATTCCTGAGGAGGATTCCTTCAGTTACAAA-3'	6658

FIGURE 6d

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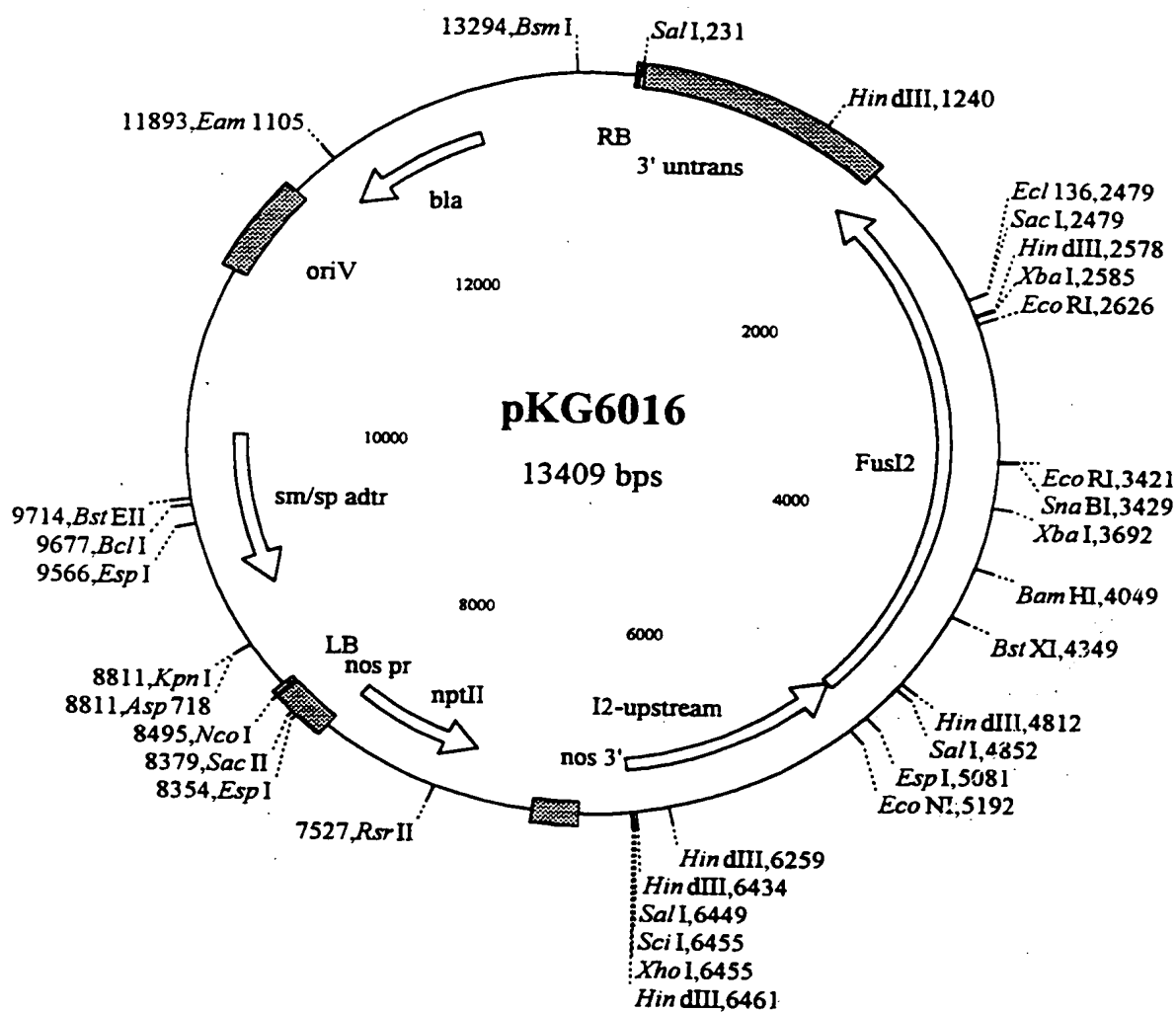


FIGURE 7